

IN THE CLAIMS:

Claims 1-22 (Canceled)

Claim 23 (Currently Amended): A trench DMOS made in accordance with the following method of claim 19;

providing an article comprising a substrate of a first conductivity type and a body region of a second conductivity type, said article having a trench which extends through said body region and said substrate;

depositing a gate oxide layer in the trench;

forming a gate in the trench, said gate having at least one layer comprising a material selected from the group consisting of polycide and refractory metals; and

forming a source region in the body region;

wherein the source region is formed after the gate oxide layer is deposited, and

wherein said source region is formed with a junction depth of less than about 0.5 μm .

said trench DMOS comprising a plurality of gate electrodes, and wherein each of said gate electrodes has a BPSG region associated with it.

Claim 24 (Currently Amended): A trench DMOS made in accordance with the following method of claim 1;

providing an article comprising a substrate of a first conductivity type and a body region of a second conductivity type, said article having a trench which extends through said body region and said substrate;

depositing a gate oxide layer in the trench;

forming a gate in the trench, said gate having at least one layer comprising a material selected from the group consisting of polycide and refractory metals; and

forming a source region in the body region;

wherein the source region is formed after the gate oxide layer is deposited.

Claim 25 (Original): The trench DMOS of claim 24, further comprising a drain,
wherein the distance between at least a portion of said gate and said drain is greater than the distance between said source region and said drain.

Claims 26-58 (Canceled)

Claim 59 (Currently Amended). The trench DMOS ~~of claim 51~~ made in accordance with the following method:

providing an article comprising a substrate of a first conductivity type and a body region of a second conductivity type, said article having a trench which extends through said body region and said substrate;

forming a gate overlying said trench and said body region, said gate having at least one layer comprising a material selected from the group consisting of polycide and refractory metals;

placing a mask over the trench;

removing the unmasked portions of the gate; and

forming a first source region in the body region,

wherein said gate includes at least one layer comprising a material selected from the group consisting of polycide and refractory metals.